Customized Wall Mounted Tritium in Room Air Monitor

Model: 607C-0.8U0.8Ci

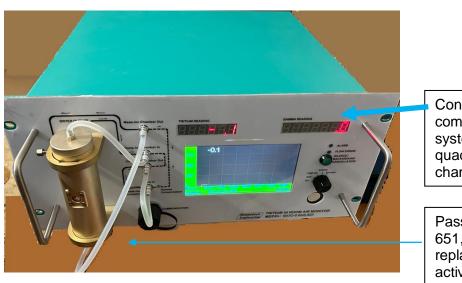
Application

607C-0.8U0.8CI - Sensetecz Engineering Tritium in Air Monitor (hereinafter referred as 607C) is a 19" rack mount type instrument. It is customized from default 607 model.

607C-0.8U0.8CI has all characteristics of default 607 except its customized sensitivity and measuring range. Please refer to the model 607 datasheet for its default characteristics. (Please insert a link to model 607 datasheet here)

The customizations of 607C-0.8U0.8Cl are as below:

- Sensitivity: 0.8µCi/m³
- Measuring range: 0.8µCi/m³ to 0.8Ci/m³.
- 0.8µCi/m³ to 0.8Ci/m³ is defined as the full measuring range for all characteristic for 607C-0.8U0.8CI, i.e. Full measuring range noble gas compensation, full measuring range gamma compensation, etc.



Control, display, communication system & quadruple Ion chamber

Passive dryer 651, could be replaced by active dryer 654

607C-0.8U0.8CI overall view

Specification - 607C-0.8U0.8CI

Customized Wall Mounted Tritium in Room Air Monitor

Performance:

Sensitivity: Better than 0.8µci/m³

Accuracy: 1μci/m³ from 1 to 100 μci/m³,

< 1% from 100 µci/m³ to 0.8Ci/m³

Measuring range: 0.8µci/m³ to 0.8Ci/m³

Compensation range: Full measuring range, 0.8µci/m³ to 0.8Ci/m³

Flow Rate: 1 to 10L/min,

KNF positive displacement diaphragm pump,

brushless, 10000hrs and up

Response time: < 10S

Gamma measurement: 0.1mR/Hour to 10R/Hour

Zero stability: Better than 2µci/m³ from 0 to 50 °C

Stability with long term: <±3% per 30 days

Gamma compensation: <10µci/m³ at 10mR; <10% within 20mR/HR

• Tritium discrimination: Elemental tritium, HTO & T₂O discrimination

via 651 Dryer, 652D catalyst converter and

software computation

Noble gas cancellation: Full Measuring range, Passive Silica gel drier is

placed on the front panel, flowing air samples between measuring chambers and compensation

chambers

Radon compensation: Software discrimination and elimination

Background cancellation: Noble gas compensation ratio: > 150:1. Gamma

compensation:<10µci/m³ at 10mR/Hr,

<10% within 20mR/HR

Structure

Ion chambers:
4 ion chambers,

2 for measuring and 2 for compensation,

500mL for each chamber

Ion chamber volume: Default, 1L: measuring, 1L: compensation

Ion trap: Yes, built-in for each chamber

Gas ports: 3/8" push to collect

Air hose: Default, 3 feet for inlet and outlet

Gas filter: Built-in, replaceable

Ion chamber purging: Yes, via cartridge heater for ion chamber

decontamination and condensation prevention

Control panel display:
7 Inch TFT LCD touch screen for numerical,

graphical model display and operation

LED for digital data and rate bar graph display

Digits display: 0.56" LED display both for tritium and Gamma

Output and communication:

Communication: RS232, RS485 and ethernet

Analog output: 4-20mA and 0-3Vdc

Audio and visual alarm: Low and high alarm within 30 seconds

• Data logging: Yes, frequency varies from 1s to 1hr, user settable

Power, operational conditions and dimension:

Power supply: 220/115VAC @ 50/60HZ

Power consumption: < 1A

Warm-up time: no need

Operational humidity: 95%RH

Operational temperature: 0 to 50°C,

Dimension: 5U, W19"x H8.72" x D10.12"

• Weight: 20Kgs